POST MENOPAUSAL BLEEDING (PMB)

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INTRODUCTION

Post-menopausal bleeding represents a major problem in gynaecological practice especially in our environment because it is thought by a great number of people to be normal and hence they present late. Post-menopausal bleeding of any form should be regarded as abnormal and not a resumption of menstruation as ignorantly thought. It can be a sign or symptom of many gynaecological conditions.

DEFINITION

Post menopausal bleeding is bleeding from the genital tract occurring 6 months or more after the menopause.

INCIDENCE

Incidence of PMB is higher in Caucasians than in Blacks[1]. It is also higher in high socioeconomic class women. Environmental causes can be adduced as reasons for this. Increased use of exogenous estrogen as in the treatment of menopausal symptoms, higher degree of obesity and hence peripheral conversion of plasma androstenedione to estrone and higher accessibility to medical services and therefore increase in reporting, have been advanced as reasons for higher incidence in Caucasians.

In the UK, incidence is 13.6/1000 women at 50 years and 1.7/1000 women at age 80 years. In Sweden, incidence stands at 13/1000 postmenopausal women at 50 years and 2/1000 at 80 years[2].

AETIOLOGY

The causes of PMB can be local or systemic. Local causes account for 66% of women with PMB while the rest are systemic[3].

LOCAL CAUSES

This can either be malignant or benign:

Malignant causes

- Cervical carcinoma- A leading genital tract malignancy in Nigeria is one of the commonest causes of PMB in our environment.
- Endometrial carcinoma- the commonest genital tract malignancy in the western world.
- Endometrial hyperplasia- a precursor to endometrial carcinoma.
- Vaginal carcinoma
- Vulval carcinoma
- Leiomyosarcoma of the uterus
- Fallopian tube carcinoma
- Secondary tumours

Benign Causes

- Endometrial polyps
- Endometritis
- Cervicitis
- Senile atrophic vaginitis
- Vaginal trauma
- Vaginal polyps
- Vulval dystrophies
- Vulval dermatitis
- Vulval trauma

SYSTEMIC CAUSES

Exogenous Estrogen use such as in hormone replacement therapy (HRT) on PMB women and use of tamoxifen. Women receiving HRT often present with abnormal bleeding. Unopposed estrogen stimulation of the endometrium oftentimes leads to endometrial neoplasia- 20% incidence of endometrial hyperplasia and 40% risk of endometrial carcinoma. Currently, combination HRT with progestin is given in conjunction with conjugated estrogen.

Endogenous estrogen as in peripheral conversion of androstenedione in obese women. Also estrogen producing tumours such as granulosa cell and theca cell tumours.

Bleeding disorders

OTHER CAUSES

Carcinoma of the bladder, urethra and rectum. Patients often mistakenly describe bleeding as coming from the vagina because of the proximity of these structures to the genital tract[3,4].

DIAGNOSIS

HISTORY: A thorough history is one of the most important steps in assessing women with PMB. This is because results of investigations are interpreted in conjunction with the whole clinical picture. Important things to seek for include patient's age, sexual activity, history of trauma, symptoms of infection or systemic disease, exact nature of bleeding, risk factors for cervical and endometrial carcinoma, drug history and history of abnormal vaginal discharge.

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PHYSICAL EXAMINATION: pelvic examination is of chief importance in identifying lesions that may be the source of PMB. Benign or malignant tumours, infection, ulcerated lesions, cervical polyps, or foreign bodies such as misplaced tampons are sometimes identified. A careful inspection of the external genitalia, vagina and cervix should be carried out; so also palpation of the adnexae and uterus for abnormally large size or irregular shape.

INVESTIGATIONS: Full blood count provides a measure of blood loss and platelet adequacy. Cervical culture is an appropriate initial step to evaluate for the presence of sexually transmitted diseases. Grouping and crossmatching of blood in instances where bleeding is severe, is also important.

Pap smear may also be performed in the initial work up of patients with PMB although this test rarely identifies the cause. Although pap smear is an important screening tool for premalignant changes of the cervix, the abnormalities unlike cervical cancer, do not generally cause PMB. However, the finding of atypical glandular cells (AGUS) on Pap smear, especially in patients with abnormal bleeding, may indicate malignancy involving the cervix or endometrium[5].

Specific investigations are generally aimed at excluding endometrial carcinoma and atypical hyperplasia of the endometrium. Endometrial biopsy involves the use of sampling devices like a 3mm Vabra aspirator or Pipelle and use of a 4mm Karman type cannula; and dilatation and curettage (D&C). Dilatation and curettage used to be regarded as investigation of choice for the diagnosis of endometrial carcinoma especially fractional curettage, but with the advent of modern techniques it no longer has a place in the management of PMB except in environments where such modern facilities are lacking. This is because apart from the fact that the method requires anaesthesia, it is associated with a wide range of complications such as uterine perforation, hemorrhage, infection and damage to the uterus and bladder. Also, less than 50% of the endometrium is sampled in most patients and hence areas of neoplasia can be missed[6].

Endometrial sampling using Vabra aspirator, Pipelle or the 4mm Karman type cannula is an out-patient procedure and can be done without anaesthesia. Other advantages over D&C include lower complication rate[7] and increased certainty in diagnosis. The demerit lies in the fact that areas of malignancy can also be missed, hence the need for visualization of the endometrium.

Hysteroscopy allows a visual inspection of the uterine cavity thereby allowing foci of abnormal portions of the endometrium to be sampled. Hysteroscopy with endometrial sampling provides the most comprehensive evaluation of the endometrium and is now recommended for women with equivocal findings on biopsy or ultrasonography.

Transvaginal Ultrasonography is also useful as an initial evaluation technique. It can provide high resolution images that permits evaluation of endometrial thickness, endometrial contour, and presence of leiomyosarcoma in the subjacent myometrium. If the endometrial thickness is greater than 5mm, endometrial sampling should be done to exclude endometrial carcinoma. Malignancy or other abnormal proliferation is unlikely when endometrial thickness is less than 5mm[8]. Transvaginal ultrasound scan can also help diagnose ovarian cancer.

Sonohysterography, which involves simultaneous transcervical instillation of fluid, can add sensitivity to the detection of lesions affecting the endometrial cavity[9]. It can delineate a submucous fibroid or an endometrial polyp.

Tumour markers for endometrial cancer have been studied but are found to be of little value in screening of postmenopausal women with endometrial cancer[10]. They are cancer Antigen 125, 19-9, 50 and 15-3; carcino-embryonic antigen and alpha feto-protein.

Urethrocystoscopy and proctosigmoidoscopy may be needed to rule out mistaken orifices of bleeding from bladder tumours, haemorrhoids and anorectal carcinoma.

Magnetic resonance imaging (MRI) can be used to delineate myometrial invasion and this makes it more accurate than Ultrasonography[11].

Other investigations like chest X-ray, intravenous urogram, computed tomographic scan may be necessary to assess metastases to various organs.

TREATMENT

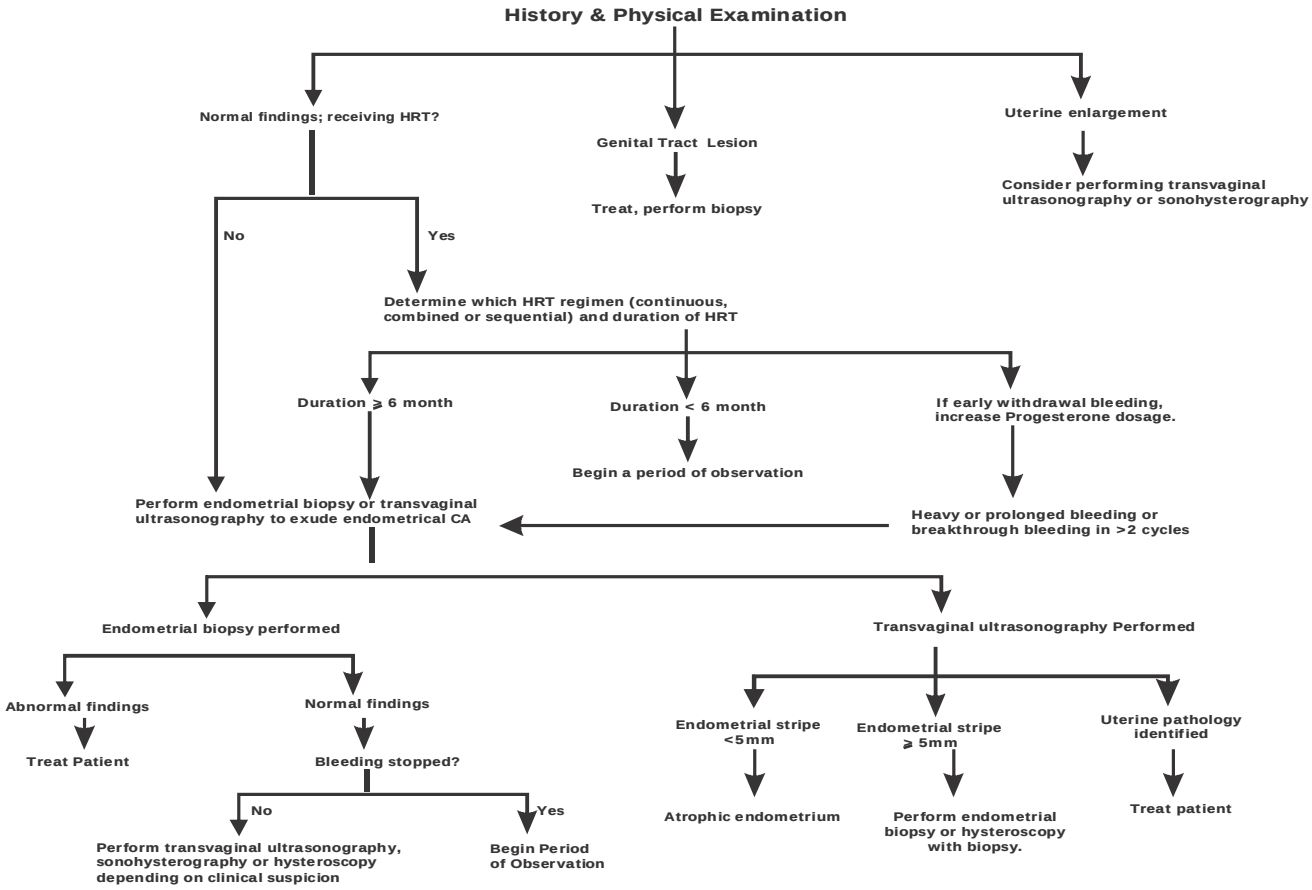
Initial treatment may require resuscitation of the patient in cases of life threatening bleeding. Specific treatment is directed at the cause of bleeding.

Treatment options may be medical, surgical or a combination of both.

Medical treatment may involve the use of topical estrogen for atrophic vaginitis and vulval dystrophies, manipulation of hormone replacement regimen, the use of antibiotics in infective cases and use of adjuvant chemotherapy.

Surgical treatment may require repair of laceration, endometrial ablation, total abdominal hysterectomy with bilateral salpingo-oophorectomy for endometrial or cervical cancer, polypectomy, etc. It should be noted that post menopausal women with persistent bleeding despite normal results of investigations are candidates for hysterectomy.

➢ The investigation and treatment of post menopausal bleeding can be summarized in the algorithm below. By Oriel K.A. And Schrager S.[11] below.



ALGORITHM FOR THE DIAGNOSTIC EVALUATION OF POST-MENOPAUSAL BLEEDING[11]

CONCLUSION

Post Menopausal Bleeding has continued to pose a major problem to practitioners in our environment as most of our patients are ignorant of the consequences of post menopausal bleeding and so present late. Health education in the general populace can go a long way in solving this problem. A careful history taking, a thorough physical examination and investigation can always help ascertain the exact aetiology of PMB and subsequently intervene with a

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